



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,885	11/04/2003	Dinesh A. Badami	BUR920030108US1	2884
30449	7590	03/09/2005	EXAMINER	
SCHMEISER, OLSEN + WATTS			NADAV, ORI	
3 LEAR JET LANE			ART UNIT	
SUITE 201			PAPER NUMBER	
LATHAM, NY 12110			2811	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,885	BADAMI ET AL.	
	Examiner	Art Unit	
	ori nadav	2811	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/04/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 7-11 and 18-20 in the reply filed on 12/14/2004 is acknowledged. The traversal is on the ground(s) that the subject matter of all claims 1-20 is sufficiently related and the search and examination of the entire application can be made without serious burden. This is not found persuasive because although the subject matter of all claims 1-20 is related, the search and examination of two separate and distinct inventions create serious burden.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the disclosure and in the drawings for two mesas over the fuse link and directly over the two vias, as recited in claim 7.

There is no support in the disclosure and in the drawings for a second dielectric layer over the fuse link and beneath the two mesas, as recited in claim 8.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (6,074,940).

Lee et al. teach in figure 2A and related text an electronic structure, comprising: a first dielectric layer 15 having at least two vias 20 filled with a first self-passivated electrically conducting material;

a fuse link 25, 40 on top of the first dielectric layer, the fuse link electrically connecting the two vias and comprising a second material having a characteristic of changing its electrical resistance after being exposed to a laser beam;

and two mesas 30 over the fuse link and directly over the two vias, the two mesas each comprising a third self-passivated electrically conducting material.

and a second dielectric layer 35 over the fuse link and beneath the two mesas, but not completely covering the fuse link,

Art Unit: 2811

wherein the second material comprises a substance selected from the group consisting of TaN, TiN, and WN,

and wherein the first and third self-passivated electrically conducting material comprises a substance selected from the group Al and W.

Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Daubenspeck et al. (6,440,834).

Daubenspeck et al. teach in figure 1f and related text a first dielectric layer 14 having at least a first via and a second via 16 both filled with a first electrically conducting material;

a first oxygen-getter shield and a second oxygen-getter shield 16 (above via 16) being directly above and in physical contact with the first electrically conducting material in the first and second vias, respectively, the first and second oxygen-getter shields comprising a second electrically conducting, oxygen-getter material ; and a fuse link 26 electrically connecting the first and second oxygen-getter shields, the fuse link comprising a third material having a characteristic resistance after being of changing its electrical exposed to a laser beam, and a first mesa and a second mesa 20a, 20b being directly over and in direct physical contact with the first and second oxygen-getter shields, respectively, the first and second mesas comprising a fourth electrically conducting material, wherein the second electrically conducting, oxygen-getter material comprises titanium.


Art Unit: 2811

Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(571) 272-1660**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**

O.N.
March 1, 2005


ORI NADAV
PRIMARY EXAMINER
TECHNOLOGY CENTER 2800